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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/733,185

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Bhavesh B. Bhatt

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08/10/2006

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EXAMINER

LAMBRECHT, CHRISTOPHER M

ART UNIT

PAPER NUMBER

2623

DATE MAILED: 08/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/733,185

Applicant(s)

BHATT, BHAVESH B.

Examiner

Christopher M. Lambrecht

Art Unit

2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 April 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 42-58 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 42-58 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 42-46, 49, and 53-58 are rejected under 35 U.S.C. 102(e) as being anticipated by Tsukidate et al., U.S. Patent No. 6,507,950 (of record).

Regarding claim 42, Tsukidate discloses a method comprising: a set-top receiver (fig.5, item 31) receiving first data (collection key 26, set by the user; col. 10, ll. 9-13); the set-top receiver receiving an electronic program guide (EPG) (program information, col. 9, ll. 65-66); the set-top receiver storing the EPG to a hard disk (fig.10, item 51) of the set-top receiver (col. 12, ll. 60-65); the set-top receiver comparing first data with data of the EPG (“match” operation, col. 12, ll. 56-59; discussed at col. 8, l. 44 - col. 9, l. 31); moving a first portion of the EPG from the hard disk to a random access memory (RAM) (internal memory of processor 55, col. 12, ll. 23-26) of the set-top receiver in response to the set-top receiver identifying a match between the first data and data of the first portion (col. 12, l. 65 - col. 13, l. 14).

As to claims 43-46, Tsukidate discloses the method of claim 42 (see above) wherein the first data identifies a television channel, a television program (title), a program type

(category), and time slot (date and time of broadcasting; extraction keys, i.e., first data, identify program attributes, col. 13, ll. 29-35; attributes include channel, title, category, and time of broadcasting, col. 7, ll. 9-16, 59-65).

Regarding claim 49, see the rejection of claim 43, above.

Regarding claim 53, Tsukidate discloses a memory medium (fig. 10, main memory of item 55) storing instructions executable by a microprocessor (fig.10, MPU of item 55) in a set-top receiver (fig.10, item 31), wherein the microprocessor implements a method in response to executing the instructions (col. 12, ll. 23-26), the method comprising the claimed steps (see rejection of claim 42, above).

Regarding claims 54-58, see the rejections of claims 42-46 and 53, above.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 47, 48, 50, and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsukidate in view of Maissel et al., International Patent Application Publication No. WO 99/01984.

Regarding claim 47, Tsukidate discloses a method as discussed above with respect to claims 42-46. Tsukidate further teaches moving portions of the EPG matching a

“recommended programs” attribute (col. 10, ll. 8-13). But Tsukidate fails to disclose receiving second and third data to the EPG; comparing the second and third data to the EPG; and storing second and third portions of the EPG in the hard disk when these portions match the received second and third data. In an analogous art, Maissel teaches program recommendations based on multiple program attributes, including channel, program title, and time slot (see page 27, para. 8 - page 28, para. 1; page 16, para. 3 - page 17, para. 2), for the benefit of providing program listings customized to the viewer’s preferences (page 22, para. 5). Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Tsukidate to include receiving first data identifying a television channel, second data identifying a television program, and third data identifying a time slot; comparing the first, second, and third data to the EPG; identifying first, second, and third portions of the EPG matching the first, second, and third data; and storing the matching first, second, and third portions in the RAM of the receiver, as taught by Maissel, to enable more accurate program recommendations by using multiple program characteristics.

As to claim 48, Tsukidate in view of Maissel discloses the method of claim 47 (see above). Tsukidate further discloses the main memory (of 55, fig. 10) is utilized as a cache memory in association with the disk drive (51, fig. 10) (col. 13, ll. 9-17). However, Tsukidate in view of Maissel fails to disclose copying the first portion from the RAM to the hard disk; and deleting the first portion from the RAM (main memory/cache of 55, fig. 10) after it is copied to the hard disk. Official notice is taken that it is well known in the art to copy data

from a cache memory to a hard disk, and to thereafter delete said data from the cache after it is copied from the hard disk (e.g., in a personal computer, when a user is working on an application, such as a spreadsheet, the spreadsheet application and its associated data are stored in the main memory/cache; when the user thereafter chooses to terminate the spreadsheet application, the data relating to the spreadsheet application stored in the cache is copied to a storage unit, such as a hard drive, and is thereafter deleted from the cache memory in order to make room in the cache for a new application), for the purpose of reducing access time for active data/applications. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Tsukidate and Maissel to include copying first portion from the RAM to the hard disk; and deleting the first portion from the DRAM after it is copied to the hard disk, for the purpose of reducing access time for active data/applications and optimizing the usage of the memory hierarchy in a set-top receiver.

Regarding claims 50 and 51, see the rejection of claim 47, above.

3. Claim 52 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tsukidate.

Tsukidate discloses the method of claim 49 (see above), including accessing the first portion stored in the RAM (col. 13, ll. 51-56) and detecting frequency of use of the stored records (col. 13, ll. 18-21). Further Tsukidate discloses the main memory (of 55, fig. 10) is utilized as a cache memory in association with the disk drive (51, fig. 10) (col. 13, ll. 9-17). However, Tsukidate fails to disclose copying a less frequently accessed portion from the

RAM to the hard disk; and deleting the less frequently accessed portion from the RAM (main memory/cache of 55, fig. 10) after it is copied to the hard disk. Official notice is taken that it is well known in the art to employ a caching scheme in which least-frequently accessed data is moved from a cache memory to a hard disk, and to thereafter delete said data from the cache after it is copied from the hard disk (e.g., in a personal computer, when a user is working on an application, such as a spreadsheet, the spreadsheet application and its associated data are stored in the main memory/cache; when the user thereafter chooses to terminate the spreadsheet application, the data relating to the spreadsheet application stored in the cache is copied to a storage unit, such as a hard drive, and is thereafter deleted from the cache memory in order to make room in the cache for a new application), for the purpose of reducing access time for active data/applications. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Tsukidate to include moving a less frequently accessed portion from the RAM to the hard disk; and deleting the less frequently used portion from the RAM after it is copied to the hard disk, for the purpose of reducing access time for active data/applications and optimizing the usage of the memory hierarchy in a set-top receiver.

Response to Arguments

Applicant's arguments with respect to claims 42-58 have been considered but are moot in view of the new ground(s) of rejection. Applicant's failure to adequately traverse

facts Officially noticed in the previous Office action is treated as an admission of the facts so noticed.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher M. Lambrecht whose telephone number is (571) 272-7297. The examiner can normally be reached on Mon-Fri, 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (571) 272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Christopher M. Lambrecht
Examiner
Art Unit 2623

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